

There are a number of solutions, surgical and non-surgical, to treat your disease. Depending on your condition, your doctor may suggest you undergo a total hip replacement (substitution of damaged bone with a hip prosthesis).

## AMIS may be your solution

The AMIS (Anterior Minimally Invasive Surgery) approach causes less surgical trauma than other techniques for total hip replacement. In fact the anterior approach is the only technique that **DOES NOT CUT MUSCLES AND DOES RESPECT NERVES**.



If you have any concerns about your new hip don't hesitate to contact your doctor and, finally...  
**...enjoy your new hip!**

Innovation in  
hip arthroplasty  
**A M I S**  
NO MUSCLES CUT

## Suffering from hip pain?

If you ever wake up in the morning and just don't feel like getting out of bed because of **hip pain, you're certainly not alone.**

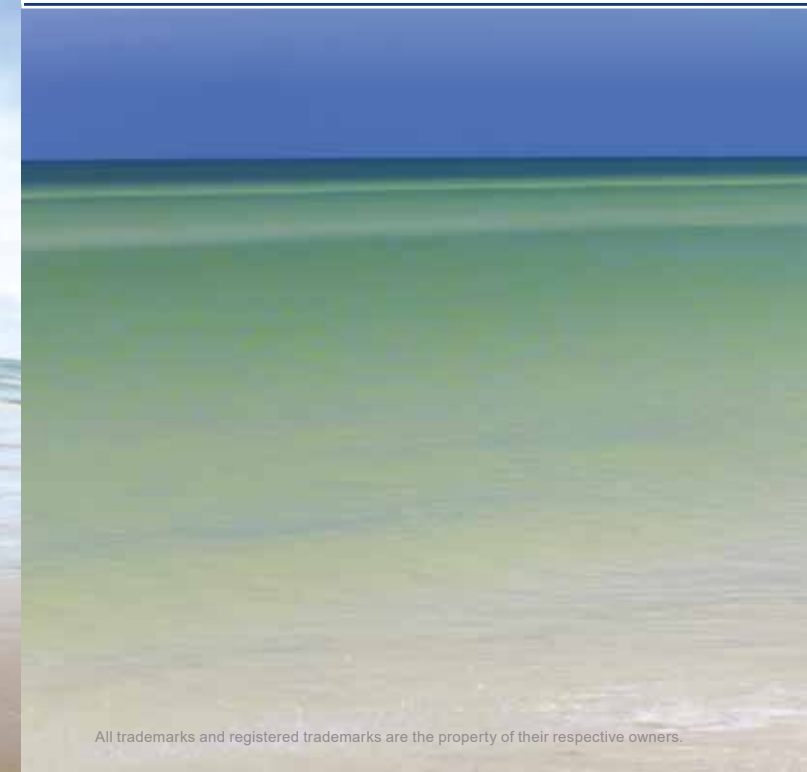
## Are you considering Total Hip Replacement?



For further information visit the website:  
**mynewamiship.com**

**Medacta**  
International 

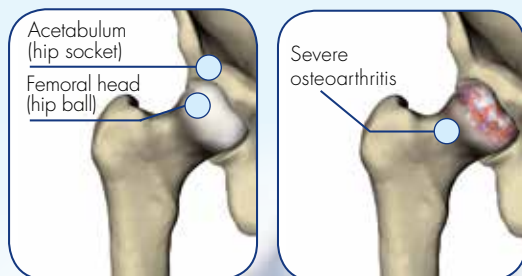
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## What is osteoarthritis?

The hip joint is formed by the articulation of the rounded head of the femur and the cup-like acetabulum of the pelvis. The main cause of hip joint diseases is the wear of the articular cartilage: osteoarthritis. This wear is perceived as **pain**.

Hip pain limits your daily activities, affects your mood, your health and, definitely, **your general well-being**. In the case of advanced osteoarthritis your doctor may suggest that you undergo a total hip replacement.



## What is Total Hip Replacement?

Total hip replacement surgery substitutes the damaged bone and cartilage of the joint with polyethylene (a plastic material) or ceramic and metallic components.

A hip prosthesis is an artificial articulation composed of a femoral stem with a head (sphere) and a socket cup.

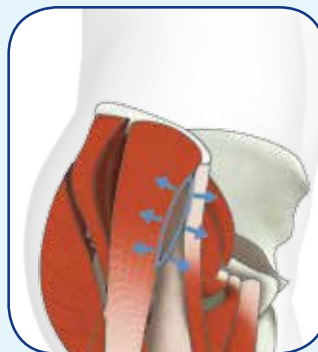
- ① The **femoral stem** is made of metal (usually a Titanium or Cobalt Chrome alloy or stainless steel), which guarantees a maximum biocompatibility.
- ② The **head** is made of ceramic or metal.
- ③ The **cup** is made of 1 or 2 pieces, depending on the procedure: cemented (usually only one component of polyethylene) or cementless (metallic **acetabular shell** and **liner**).



## Why an AMIS Total Hip Replacement?

The AMIS technique causes less surgical trauma than other techniques because **NO MUSCLES ARE CUT**, only displaced.

AMIS is a surgical technique that will improve the quality of your life and hasten your recovery after a Total Hip Replacement (THR).



## What is AMIS?

The AMIS (**Anterior Minimally Invasive Surgery**) approach is a **true intermuscular and internervous minimally invasive surgical technique**.

### AMIS DOES NOT CUT MUSCLES AND DOES RESPECT NERVES

AMIS can potentially provide you with the following benefits:

**Decreased post-operative pain:** the AMIS approach can reduce the post-operative pain as muscles are not cut.<sup>[1,2]</sup>

**Shorter rehabilitation:** rehabilitation can usually start the day of the operation or the day after, subject to your doctor's approval, based on your post-operative conditions.<sup>[2,3]</sup>

**Shorter hospital stay:** the AMIS technique usually significantly reduces the duration of hospital stay.<sup>[4,5]</sup>

**Small skin scar:** with AMIS, the skin incision is often shorter than with "conventional" surgery.<sup>[2]</sup>

**Faster return to daily activities:** the AMIS technique allows you to return to daily activities in a shorter time frame.<sup>[4,6,7]</sup>

**Less blood loss:** preservation of muscles and vessels potentially reduces blood loss.<sup>[2,5]</sup>

**Reduced risk of dislocation** (separation of the hip ball and socket): the risk of dislocation is reduced because the anterior approach is performed from the front of your body and dislocation is mainly related to posterior hip structure damage.<sup>[3,8]</sup>

**Prevention of limping:** minimizing muscle and nerve damage reduces the chances of limping.<sup>[9,10,11,12]</sup>

## Current approaches and AMIS

The surgeon can access the hip joint by different paths called "surgical approaches".

### THE MISLEADING CONCEPT OF MINIMALLY INVASIVE SURGERY

There are a number of **approaches** advertised as minimally invasive (posterior, lateral or double incision approach) which **are only reduced skin incision techniques** and are **associated with the same muscle and nerve injury** as "conventional" approaches.

### AMIS: THE TRUE MINIMALLY INVASIVE SURGERY

AMIS, Anterior Minimally Invasive Surgery, **is characterized by the preservation of muscles and nerves** encountered during the surgery to the hip joint capsule and offering a reduced skin incision.

#### Bibliographic references:

<sup>[1]</sup> F Laude et al, Arthroplastie totale de hanche par voie antérieure et son évolution mini-invasive, EMC, 2004 44-667-B <sup>[2]</sup> F Rachibauer, Minimally Invasive total hip arthroplasty: anterior approach, Orthopäde, 2006 Jul, 35(7):723-4, 726-9 <sup>[3]</sup> T Sigquier et al, Miniincision anterior approach does not increase dislocation rate: a study of 1037 total hip Replacement, Clin Orthop Relat Res, 2004 Sep, (426): 164-73 <sup>[4]</sup> MH Huo et al, What's new in hip arthroplasty, JBJS Am, 2005 Sep, 87(9):2133-46 <sup>[5]</sup> JM Matta et al, Single-incision anterior approach for total hip arthroplasty on an orthopaedic table; Clin Orthop Relat Res, 2005 Dec, (441): 115-24 <sup>[6]</sup> RA Berger et al, Rapid Rehabilitation and recovery with minimally invasive total hip arthroplasty, Clin Orthop Relat Res, 2004, (429): 239-247 <sup>[7]</sup> RE Kennon et al, The minimally invasive anterior approach to hip arthroplasty, Orthopäde, 2006 Jul, 35 (7): 731-7 <sup>[8]</sup> B Bush et al, Dislocation after hip hemiarthroplasty: anterior versus posterior capsular approach, J Orthopaedics, 2007 Feb, 30(2):138-44 <sup>[9]</sup> C Dora, F Kalberer, Muscular damage after total hip arthroplasty: conventional versus minimally invasive anterior approach, AOA 2008, Australia, Hobart <sup>[10]</sup> C Pfirrmann et al, Abductor Tendons and Muscles Assessed at MR Imaging after Total Hip Arthroplasty in Asymptomatic and Symptomatic Patients, Radiology 2005, 235: 969-976 <sup>[11]</sup> C Dora, MR imaging of the abductor tendons and muscles after total hip replacement in asymptomatic and symptomatic patients, EFORT 2007 <sup>[12]</sup> C Dora, Der anteriore Zugang für die minimal-invasive HTEP, Leading Opinions, Sept 2006, 1/2006